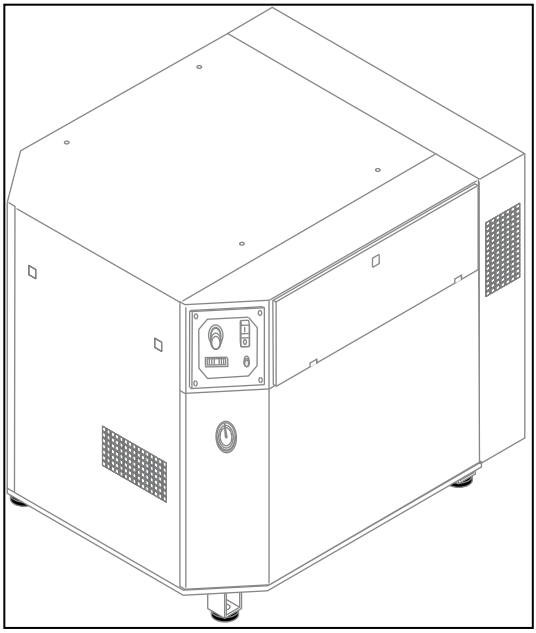
Instruction and maintenance manual

CE



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197634000 - ED.6 - 08/2010 - ENGLISH

DECLARATION OF CONFORMITY

The following declaration is attached to the compressor in original copy.
All identification data: manufacturer, model, code and serial number are stamped on EC label.

I - Dichiara sotto la sua esclusiva responsabilità, che il compressore d'aria qui di seguito descritto è conforme alle prescrizioni di sicurezza delle direttive: 2006/42/CE, 2000/14/CE, 2006/95/CE, 2004/108/CE, 2009/105/CE, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4.	**GR -** Δηλώνει, με αποκλειστικά δική της ευθύνη, ότι ο συμπιεστής αέρος που περιγράφεται παρακάτω ανταποκρίνεται στις προδιαγραφές ασφαλείας των οδηγιών: 2006/42/ΕΕ, 2000/14/ΕΕ, 2006/95/ΕΕ, 2004/108/ΕΕ, 2009/105/CE, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4.
GB - Declares under its sole responsibility that the air compressor described below complies with the safety requirements of directives: 2006/42/EC, 2000/14/EC, 2006/95/EC, 2004/108/EC, 2009/105/EC, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4	**PL** - Oświadcza pod pełną własną odpowiedzialność, że opisana niżej sprężarka powietrzna odpowiada wymaganiom bezpieczeństwa zawartym w Dyrektywach 2006/42/EC, 2000/14/EC, 2006/95/EC, 2004/108/EC, 2009/105/EC, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4
F - Déclare sous son entière responsabilité que le compresseur d'air décrit ci-après est conforme aux prescriptions de sécurité des directives : 2006/42/CE, 2000/14/CE, 2006/95/CE, 2004/108/CE, 2009/105/CEE, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4..	**CZ** - prohlašuje s plnou odpovědností, že uvedený vzduchový kompresor vyhovuje bezpečnostním požadavkům směrnic 2006/42/ES, 2000/14/ES, 2006/95/ES**,** 2004/108/ES **,** 2009/105/ES, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4.
D - Erklärt unter ihrer alleinigen Verantwortung, daß der in Folge beschriebene Luftkompressor den Sicherheitsvorschriften der Richtlinien: 2006/42/EG, 2000/14/EG, 2006/95/EG, 2004/108/EG, 2009/105/EG, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4..	**SK** - Zodpovedne vyhlásuje, že uvedený vzduchový kompresor zodpovedá bezpečnostným požiadavkám smerníc 2006/42/ES, 2000/14/ES, 2006/95/ES, 2004/108/ES, 2009/105/ES, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4.
E - Declara bajo su exclusiva responsabilidad que el compresor de aire descrito a continuación responde a las prescripciones de seguridad de las directivas : 2006/42/CE, 2000/14/CE, 2006/95/CE, 2004/108/CE, 2009/105/CEE, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4	**H** - Teljes felelősségének tudatában tanúsítja, hogy az alábbiakban jellemzett légkompresszor a 2006/42/EC, 2000/14/EC, 2006/95/EC, 2004/108/EC, 2009/105/EC, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4
NL - Verklaart onder zijn eigen verantwoordelijkheid dat de hieronder beschreven luchtcompressor in overeenstemming is met de veiligheidsvoorschriften van de richtlijnen: 2006/42/EG, 2000/14/EG, 2006/95/EG, 2004/108/EG, 2009/105/EG, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4	**LT** - Su visa atsakomybe pareiškia, kad žemiau aprašytas oro kompresorius atitinka saugumo direktyvų 2006/42/ES, 2000/14/ES, 2006/95/ES, 2004/108/ES, 2009/105/ES, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4
N - Erklærer under eget ansvar at luftkompressoren her beskrevet er i overensstemmelse med sikkerhetsforskriftene i direktivene:, 2006/42/EC, 2000/14/EC, 2006/95/EC, 2004/108/EC, 2009/105/EC, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4..	**LV** - Apliecinā zem savas pilnīgas atbildības, ka apakšā aprakstītais gaisa kompresors atbilst direktīvu 2006/42/EC, 2000/14/EC, 2006/95/EC, 2004/108/EC, 2009/105/EC, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4..
S - Försäkrar under eget ansvar att den luftkompressor som beskrivs följande är i överensstämmelse med säkerhetsföreskrifterna i EU-direktiv: 2006/42/EG, 2000/14/EG, 2006/95/EG, 2004/108/EG, 2009/105/EG, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4..	**EST** - Avaldab enda täieliku vastatusega, et edaspidi kirjeldatud õhukompressor vastav ohutuse nõudmistele direktiividele 2006/42/CE, 2000/14/CE, 2006/95/CE**,** 2004/108/CE, 2009/105/CE, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4.
DK - Forsikrer på eget ansvar, at luftkompressoren, der beskrives nedenfor, er i overensstemmelse med sikkerhedsforskrifterne i direktiverne: 2006/42/EC, 2000/14/EC, 2006/95/EC, 2004/108/EC, 2009/105/EC, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4..	**SLO** - Na lastno odgovornost izjavlja, da je spodaj opisani zračni kompresor v skladu z varnostnimi predpisi, ki veljajo za stroje 2006/42/EU, 2000/14/EU, 2006/95/EU, 2004/108/EU , 2009/105/EU, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4..
P - Declara sob a sua exclusiva responsabilidade que o compressor de ar descrito a seguir está em conformidade com as prescrições de segurança das directivas: 2006/42/CE, 2000/14/CE, 2006/95/CE, 2004/108/CE, 2009/105/CEE, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4	**RO –** Declara pe propria raspundere ca,compresorul de aer denumit in continuare,este in conformitate cu cerintele de securitate cuprinse in directivele:2006/42/CE, 2000/14/CE, 2006/95/CE, 2004/108**/**CE **,** 2009/105/CE, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4.
FI - Vakuuttaa, että seuraavassa esitelty ilmakompressori vastaa alla lueteltujen direktiivien turvallisuusvaatimuksia: 2006/42/EC, 2000/14/EC, 2006/95/EC, 2004/108/EC, 2009/105/EC, EN 1012-1, EN 60204-1, EN 60335-1, EN 61000-6-3/4..	**RU -** Заявляет под свою полную ответственность, что нижеописанный воздушный компрессор соответствует требованиям безопасности согласно директивам 2006/42/EC, 2000/14/EC, 2006/95/EC, 2004/108/EC, 2009/105/EC, EN 1012-1,EN 60204-1,EN 60335-1,EN 61000-6-3/4

Use of the Instruction manual

This manual is integral part of this compressor and should be kept for its whole working life.
Keep this manual in a safe place so not to damage it.
If the compressor is sold to a third party, also give the Instruction Manual to the new Owner.
This manual should be carefully read before starting the compressor up and in case of any doubt on its operation.
This manual contains important safety information on operation procedures, which should be complied with, otherwise injuries to people or damages to the machine might occur. Important use and maintenance instructions are also mentioned in this manual.
Should this manual be lost, please ask for a new copy.
Spare parts list is not considered as integral part of this manual, since it is available at authorized dealers' offices only.

Symbols

The following symbols are used for especially important information:

Caution
Highlights precautions to be taken to ensure safety of the operator, people in the compressor working area and the compressor.

Notes
Highlights recommended instructions or precautions to be taken to have an easier maintenance procedure or to explain most important instructions.

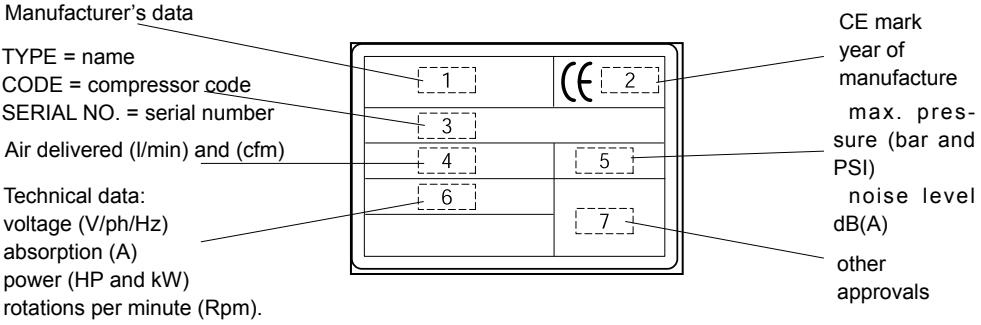
Specialized personnel
Every intervention highlighted by this symbol is exclusively the job of a specialized technician.

Technical Assistance

Use only genuine spare parts for servicing the compressor.
Non-genuine spare parts might cause injuries to people. For efficient Technical Assistance, please always state model, type and part number of Your compressor. Those data are specified both on compressor plate and label on manual cover page.

Product identification

For any request for copies it is ESSENTIAL to provide ALL the data stamped on EC label.



1. GENERAL INFORMATION

This compressor was designed and manufactured to be used only to deliver compressed air for handicraft and/or industrial applications in full compliance with the safety instructions provided in the following paragraphs.

Compressor can be equipped with several accessories for blowing, washing and painting as well as air tools. See the relevant manuals for correct use of accessories and tools.

Carefully read the User's Manual before servicing the compressor.

Before performing maintenance work, switch off the compressor and cut off power supply by switching off the wall-mounted switch (if any).

What SHOULD BE DONE:

Understand how to stop the compressor at once and become familiar with the use of all controls.

Before any operation the air in the compressor tank should be released, then close the cock (if provided) located between the compressor and the tank; unplug the compressor so to avoid any accidental compressor start.

After any maintenance operation make sure all the disassembled parts are properly assembled.

To have a safe operation, make all checks mentioned in chapter "Start-up" before starting the compressor.

Keep children and animals away from the working area, so as to avoid any injury caused by devices connected to the compressor.

Carefully read the instructions of any tool you have installed, especially if a spray gun is used, make sure the shop is well ventilated before you start painting.

Always start and stop three-phase compressor through the wall switch.

Should the compressor be working around the clock, the use of soundproof headset is recommended.

What SHOULD NEVER BE DONE:

Do not paint indoor or close to naked flames.

Never touch cylinder head, cooling fins and delivery tube since they become very hot while working. They are still very hot for some time after stopping the compressor.

Never place inflammable nylon or cloth objects near or/and on the compressor.

Never move the compressor when the tank is under pressure.

Never use the compressor if the power cable is faulty or the connection is not safe.

Never aim the air jet either at people or animals.

Never allow anyone to operate the compressor without giving him/her proper instructions

Never hit flywheel and fans with metal or blunt objects. Compressor might break or be seriously damaged.

Never operate the compressor without an air filter.

Never tamper with the safety valve or the tank.

Never use the compressor in potentially explosive premises.

Never connect the air outlet cock to a tube with a max. capacity which is lower than the compressor capacity.

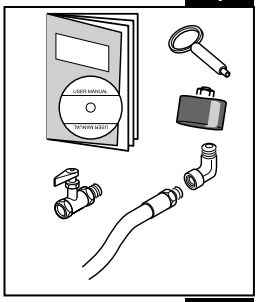
Never run the compressor when temperature is under 0°C .

Standard accessories

Your compressor is delivered with the following accessories (fig.1):

- User's manual (cd-rom)
- Vibration-dampers + key to open panels
- Elbow + line cock
- Connection hose (models without tank).

1



Unpacking and Handling

The compressor is usually shipped to the customer with a carton cover. Wear protective gloves and cut outer straps. Remove then package by lifting it from the top.

Before removing the compressor, make sure it is intact (outside), open access doors (if any) and visually check components for damage. Check that all accessories are included.

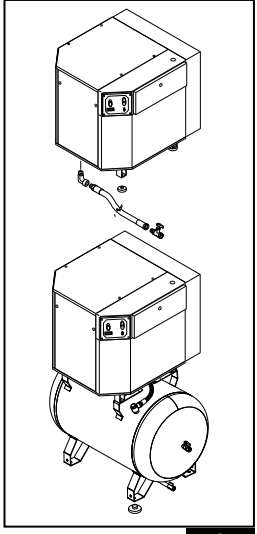
Lift machine with a transpallet or fork lift truck, fit the vibration-damping pads in their housings and transport the machine with the utmost care to the place of installation. (fig.2)

Connect the elbow as shown, and then connect the connection hose and the line cock supplied (fig.2). Connection to tank and/or to a compressed air line must be carried out by a specialised technician.

You are advised to keep the packing material in the event you need to re-locate the compressor. Keep package at least for the duration of the warranty period, so the compressor can be safely shipped to a service centre, if needed.

When no longer needed, deliver packing material to the special collection centres for disposal.

2

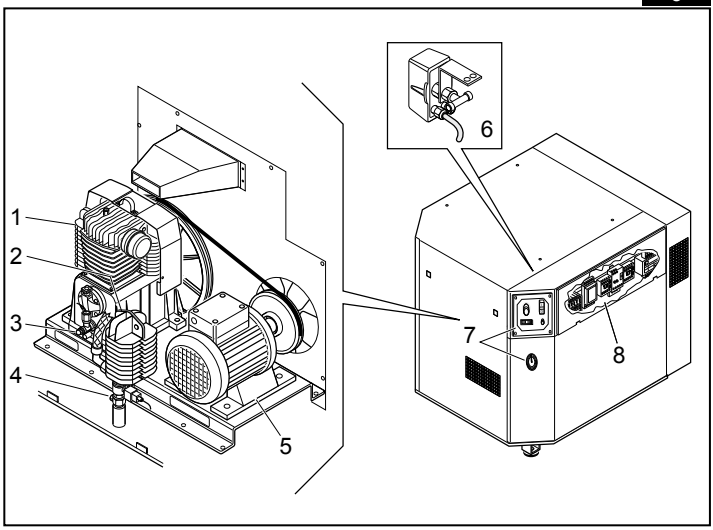


Compressor description

Compressor main components are (fig.3):

1. Bare pump
2. Air radiator
3. Oil control (if any)
4. Check valve
5. Electric motor
6. Pressure switch (positioned outside on SE models)
7. Control panel (apart from SE models)
8. Electric equipment (apart from SE models)

3



2. INSTALLATION

Placement

Upon installation, make sure that the chosen place is in compliance with all prevailing national safety standards and meets the following requirements:

• low percentage of dust suspended in air,

• shop must be suitably sized and well ventilated so that room temperature never exceeds 40°C (fig.4-A), when the compressor is working. If this is not the case, install one or more exhaust fans to extract hot air. Ideally, the fans should be installed close to the ceiling.

Once correctly positioned, remove the block used for transport (see fig.4-B).

Power connection

The compressor undergoes functional testing at the factory and is delivered ready for use.

Power connection is a critical phase of installation. Before making any operation, **make sure** that mains voltage is the same as the voltage rating specified in the CE plate and that switch is set to **(0)** or OFF (concept SE) (fig.5).

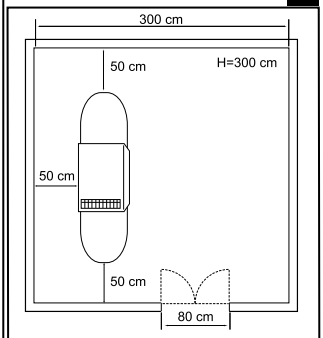
Have a wall-mounted switch provided with **plug fuses** (**rating must be at least equal to** the values indicated in the relevant table) installed upstream of the control panel by a skilled technician. Switch should be installed within the operator's reach. See wiring diagrams on chapter 6.

In the event the machine needs to be modified for compliance with the rules in force in the User's country or for any other requirements, have the job performed by skilled personnel only.

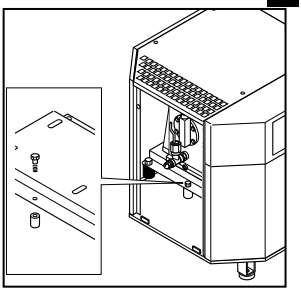
Power **HP - kW**	Absorption (V230) - **A**	Absorption (V400) - **A**
4 -3	12,5	7,2
5,5 - 4	16,6	9,6
7,5 - 5,5	22	12,7
10 - 7,5	-	16

4

A



B



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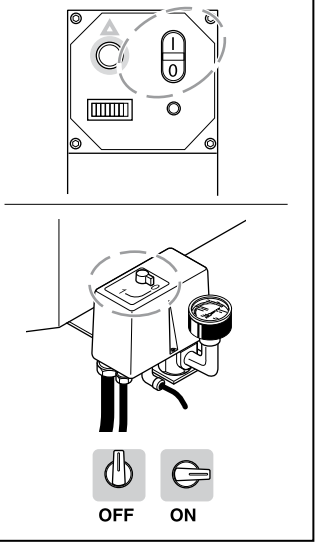


Type of operation

Starting

Concept SE: compressor start is controlled by a pressure switch (switch on ON - fig.5), and after a few seconds the compressor reaches correct rpm.

Concept CT (star-delta): by pressing the "I" button located on the dashboard (Figure 5), the boot sequence starts. The compressor starts slowly ("star" connection), then after about 7 seconds enters the "delta" connection and the normal operating cycle starts.

Operation

The compressor will stop when max. pressure is reached and it will automatically restart only when pressure is at the minimum allowed value.

The default values (unless otherwise requested) are as follows:

Standard models (Max 10 bar): 8 bar start / stop 10 bar

High pressure models - AP (max pressure14 bar): start 12 bar / stop 14 bar

Working pressure adjustment

At User's discretion, a pressure reducer can be installed downstream of the compressor.

Have the distribution line configured by a qualified technician.

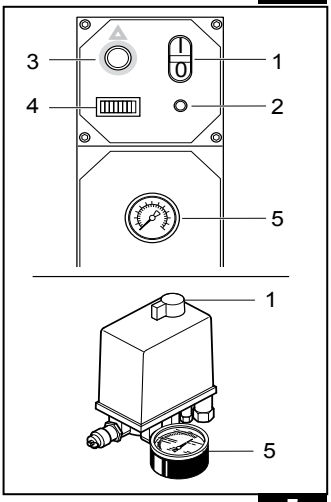
Always look up the ideal operating pressure of the tool you wish to use in the relevant manual. After use, set pressure to 0 in order to prevent early wear of pressure reducer.

Controls and check devices(fig.6)

The control panel (apart from SE models) includes the following controls and check devices

1. 0/1 Switch (TA) - ON/OFF (SE)
2. Oil level light (if provided with oil control)
3. Emergency stop button
4. Working hour counter
5. Air pressure gauge at delivery end

6



First start-up

Once machine has been placed and connected to mains, it is ready for operation.

It is recommended this operation - operational test - be performed by a specialized technician.

Before continuing, make sure that:

mains voltage is the same as voltage mentioned in the CE plate;

all connections have suitable cross-section cable and that cables are neither damaged nor have bare wires;

wall-mounted switch is equipped with suitable fuses;

oil level is above the minimum (fig. 7);

machine has been connected to tank.

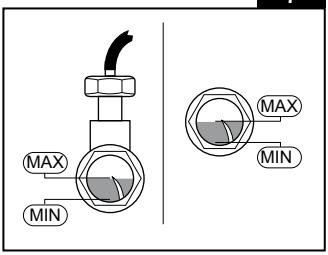
After checking the above, proceed as follows:

Power the wall switch on

Start the compressor powering the switch 1 (fig.6).

Check that the direction of rotation is the same as indicated by the arrow on the motor case (fig.8).

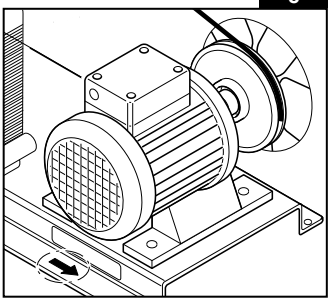
7



If the compressor is running in the wrong direction of rotation, power the machine immediately off. Power the main switch off and reverse two phases at terminals L1-L2-L3 of the switch. Restart the machine after powering the voltage on. Allow the motor to run for at least 5 minutes with the air cock open. Close the air cock and check that compressor is loading tank and that it duly stops once pressure gauge 5 detects that max. pressure has been reached.

Now you may appreciate the easiness of use of your compressor. The pressure switch, which stops the motor when the max. pressure allowed is achieved, makes the compressor start again when pressure goes below the minimum threshold (about 2 bar less than the max. pressure).

8



To stop the compressor, always use switch 1. That way, compressed air is drained from inside the head and re-starting is facilitated.

Press the emergency stop button in emergency cases ONLY.

Safety devices

- Operating pressure switch (see fig. 3/5): determines STOP and START pressures
- Oil level control (if provided)

1) Oil level is checked every 5 seconds during compressor standard operating mode. If the feeler detects a low oil level for 12 times in a row, the compressor is stopped and the **warning light (fig. 9- ref. 2) turns on (steady light).**

What to do: power off and check the oil level, top up if necessary. Allow some minutes and then restart the compressor. Should the machine stop once again, call an authorized service center.

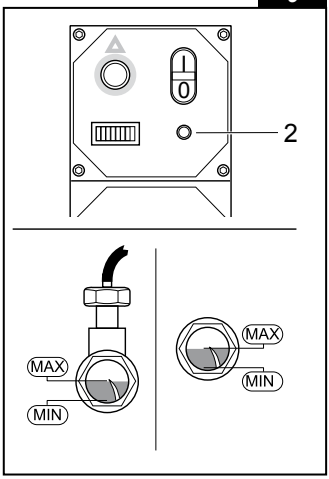
2) If the light **(fig. 9-ref.2) flashes after starting up the compressor** or during compressor standard operation, the following might have happened:

- feeler short-circuited or contact open. Call an authorized service center in any case, as the feeler needs to be replaced.

Should the above happen, the compressor can work for 3 hours more. Then it should be powered off and on again to continue working until the feeler is replaced.

- Oil level indicator (fig.9)

9



ALWAYS CHECK OIL LEVEL BEFORE RESTARTING THE COMPRESSOR.

4. MAINTENANCE

Before carrying out any maintenance operation:
Switch off the machine and the wall-mounted switch.
Bleed air from inside compressor and/or tank.
Close the air cock between compressor and tank (if provided)

Cabinet panels disassembly

Front and upper panels have to be removed to access the compressor.

Upper panel: unscrew the screws with a 5-mm socket wrench and lift the panel.

Front panel: use the key supplied with the machine to open the locks and remove panel by first pulling it upwards and then outwards.

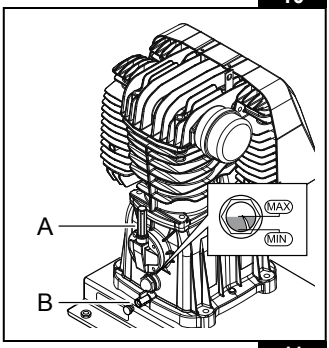
Never operate the compressor with the protection panels removed.

After the first 100 operating hours

- Check that all screws are tightened, with special attention to head screws.

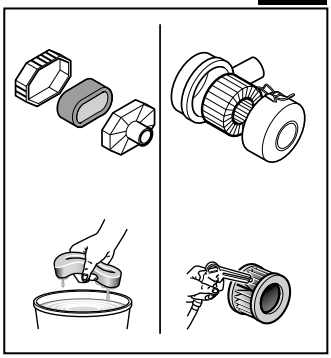
Torque		
Model	Head (Nm)	Flywheel (Nm)
MK113	27	28
BK114/BK119	45	28
BK120	45	75

10



- Check that all tubing connectors are tightened.
- Check that the terminals of all wires brought to the control panel are tightened.
- Check for any dust inside the cabinet to determine whether the conditions in the shop meet recommended requirements. If so, **the compressor should be cleaned.**
- Change oil in the tank.

11



After the first 50 operating hours / 1st working week: oil level check and top-up (fig.10)

Check oil level, if the level is below MAX., remove rod A and top up through filler plug.

EVERY 300 HOURS / month: suction filter cleaning (fig.11)

SPONGE FILTER : remove front plastic panel and remove the sponge element, wash in a solution containing normal detergent, rinse and dry completely before refitting.

PAPER FILTER: Remove the metal half-shell and extract the paper item, clean by blowing compressed air.

ALWAYS replace damaged filter elements.

Do not operate the compressor without the suction filter fitted, as foreign bodies or dust could seriously damage the inside components.

NOTE: REPLACE FILTERING CARTRIDGE EVERY TWO OIL CHANGES.

EVERY 300 HOURS: oil change (fig.10)

To proceed with the replacement:

remove the cap from the filler plug A, connect the (supplied) drain hose to cock B, and collect the used oil in a bowl.

Remove the drain hose, screw the cap on the cock B, and fill with new oil through the filler A.

Top up and change oil when the compressor is hot.

The compressor is delivered with a special semi-synthetic oil (Syntenergy, available by authorized dealers) and which you should use.

This oil can possibly be replaced with one of the oils listed in the table, which will be used for subsequent refilling.

Never mix different oils.

Do not spoil the environment with used oil: contact the body responsible for correct disposal.

Syntenergy	Fuch Renolin 104L GV100
Agip Dcrea 100	Api CM-8X
Bp Energol CS100	Castrol Aircol PD100
Esso Exxc Olub H150	IP Calatia oil ISO 100
Mobil Rarus 427	Total Dacnis P100

EVERY 500 HOURS: drive belt tension check

Remove upper and rear panels. To check belt tension, apply a 30N/3 kg weight at belt mid-length.

Belt flexion should be about 10 mm (fig.12).

Loosen electric motor nuts. Tension up belt at motor end, taking care to preserve alignment with compressor pulley. Re-tighten the nuts.

Routine maintenance

Every 6 months

Clean air radiator and all radiator fins to preserve cooling efficiency and ensure greater machine performance.

Every 2 years

Check and clean suction and delivery valves.

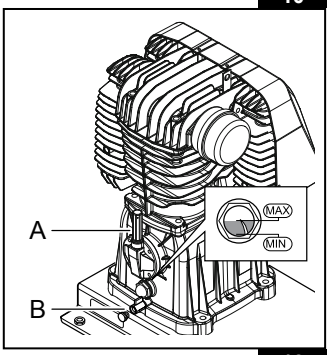
Inspect check valve and change seal (A) (fig.13), if necessary. In these cases it is recommended to change relevant gaskets.

Compressor disposal

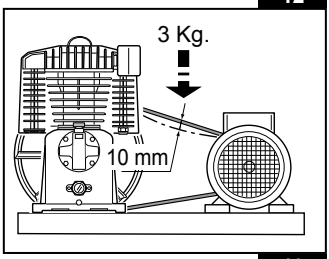
Dispose of all materials according to prevailing rules.

Always contact special disposal and recycling centres.

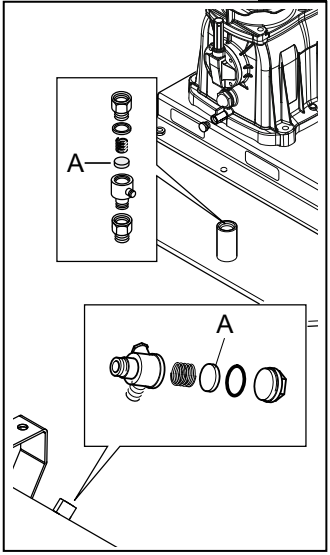
10



12



13

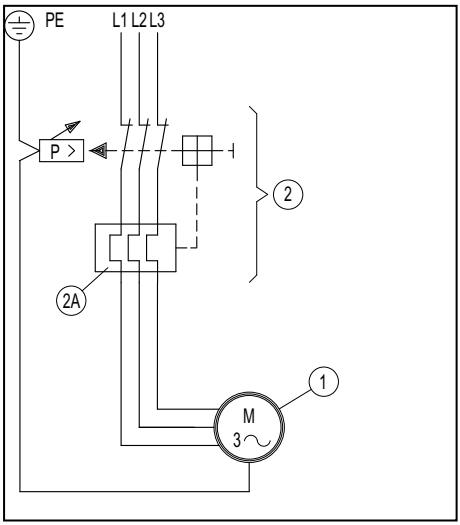


5. TROUBLESHOOTING

Problem	Cause	Remedy
Air leaking off pressure switch valve when the compressor is stopped.	Check valve leaking.	Bleed air off the tank, remove the check valve cap and clean valve seat and sealing element. Replace the sealing element, if necessary.
Air leaking off pressure switch valve for a long time when the compressor is running.	Loadless start valve broken.	Replace the valve.
The compressor stops and cannot be restarted.	Oil Control has triggered. (if provided)	Top up with oil and restart. Should the compressor stop once again, call a specialized technician.
The compressor stops once max. pressure has been reached and the safety valve starts working.	Safety valve faulty	Stop the compressor with no delay and replace the valve.
The compressor does not stop once max. pressure has been reached and the safety valve starts working.	Pressure switch defective or broken.	Stop the compressor with no delay and check setting: if necessary call a specialized technician.
The compressor does not charge and causes overheating.	Heat gasket or valve broken.	Stop the compressor with no delay and call a specialized technician.
The compressor is too noisy and rattles.	Bearings seizure.	Stop the compressor with no delay and call a specialized technician.

6. WIRING DIAGRAMS

Concept SE



1) .....Three-phase electric motor
2) .....Pressure switch with overload cutout
2A).....Thermal relay

Motor cable cross-section:

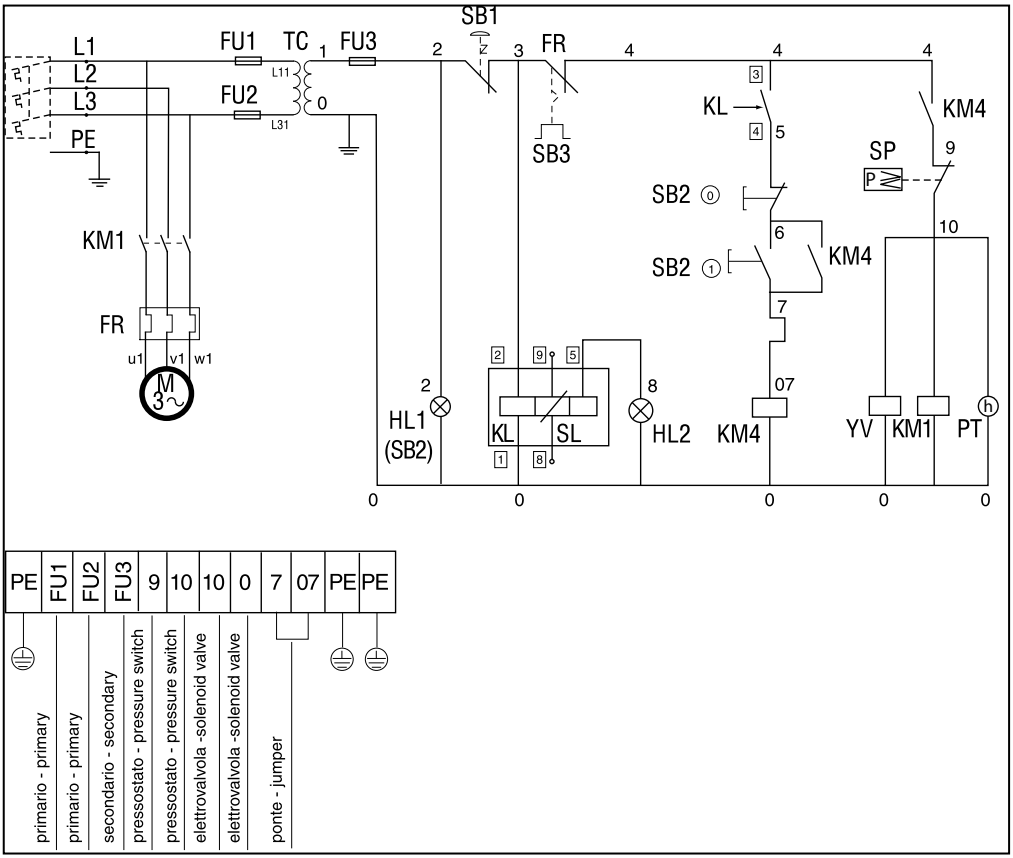
4 Hp compressors
V230.....4G2.5 mm²
V400.....4G1.5 mm²

5,5 HP compressors
V230.....4x4 mm²
V400.....4G1.5 mm²

7,5 HP compressors
V230.....4x6 mm²
V400.....4G2.5 mm²

6. WIRING DIAGRAMS

Concept with direct starting



TC .....Transformer pr.0/230/400 sec.0/230 63VA
FU1-FU2 .....Fuses 6,3x32 4A 500V GF
FU3 .....Fuses 6,3x32 1A 500V GF
KM1.....Line contactor 230V 50-60Hz
KM4.....Ancillary contactor 230V 50-60Hz
FR .....Thermal relay-reset man/aut - 1L+1R
SB1 .....Emergency stop button +n.1 NC 230 10A
SB2 .....Luminous button +1NC+1NA+bulb carrier
SB3 .....Reset button FR
YV .....Solenoid valve 220/230 VAC 50/60HZ 15VA
KL.....Oil control 230V 50/60HZ
SL.....Oil level probe
HL1.....White indicator light BASS 230V
HL2.....Yellow indicator light 10
PT..... Hour counter
Jumper ..... For remote control installation

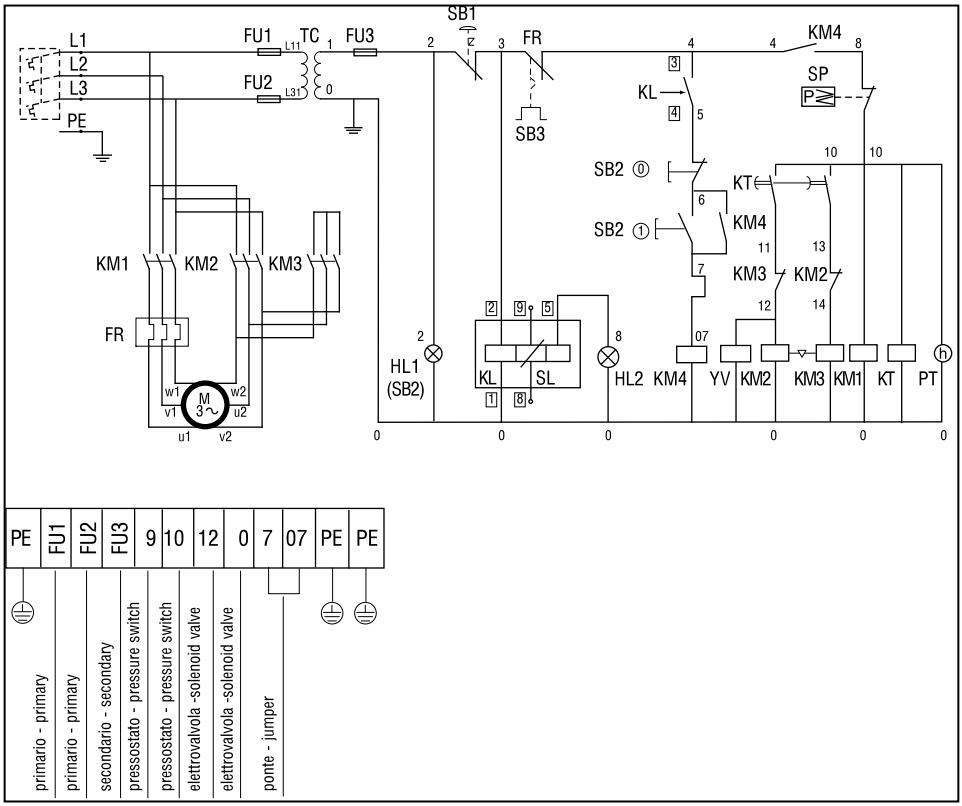
Motor cable cross-section:

4÷5,5 HP compressors
V230.....4G2.5 mm²
V400.....4G1.5 mm²

7,5 HP compressors
V230.....4G4 mm²
V400.....4G2.5 mm²

6. WIRING DIAGRAMS

Concept remote start controlled (with Oil Control)



TC .....Transformer pr.0/230/400 sec.0/230 63VA
FU1-FU2 .....Fuses 6,3x32 4A 500V GF
FU3 .....Fuses 6,3x32 1A 500V GF
KM1.....Line contactor 230V 50-60Hz
KM2.....Delta contactor 230V 50-60Hz
KM3.....Star contactor 230V 50-60Hz
KM4.....Ancillary contactor 230V 50-60Hz
KT.....Timer 230V 50/60Hz
FR .....Thermal relay-reset man/aut - 1L+1R
SB1 .....Emergency stop button +n.1 NC 230 10A
SB2 .....Luminous button +1NC+1NA+bulb carrier
SB3 .....Reset button FR
YV .....solenoid valve 220/230 VAC 50/60HZ 15VA
KL.....Oil control 230V 50/60HZ
SL.....Oil level probe
HL1.....White indicator light BASS 230V
HL2.....Yellow indicator light 10
PT..... Hour counter
Jumper ..... For remote control installation

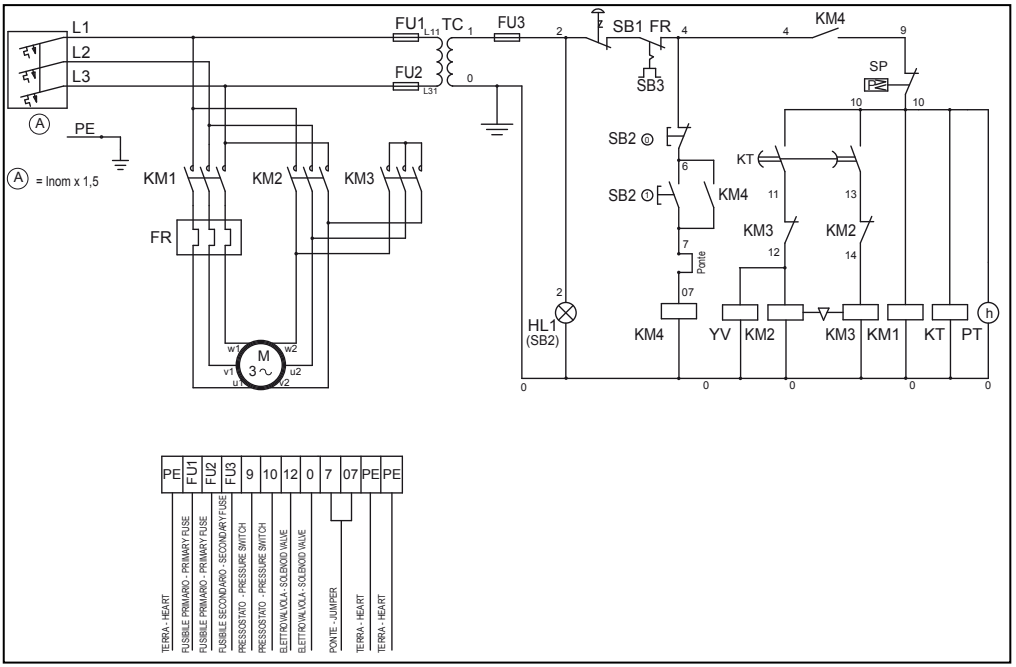
Motor cable cross-section:

4÷5,5 HP compressors
V230.....7G1.5 mm²
V400.....7G1.5 mm²

7,5÷10 HP compressors
V230.....7G2.5 mm²
V400.....7G1.5 mm²

6. WIRING DIAGRAMS

Concept controlled (without Oil Control)



TC .....Transformer pr.0/230/400 sec.0/230 63VA
FU1-FU2 .....Fuses 6,3x32 4A 500V GF
FU3 .....Fuses 6,3x32 1A 500V GF
KM1.....Line contactor 230V 50-60Hz
KM2.....Delta contactor 230V 50-60Hz
KM3.....Star contactor 230V 50-60Hz
KM4.....Ancillary contactor 230V 50-60Hz
KT.....Timer 230V 50/60Hz
FR .....Thermal relay-reset man/aut - 1L+1R
SB1 .....Emergency stop button +n.1 NC 230 10A
SB2 .....Luminous button +1NC+1NA+bulb carrier
SB3 .....Reset button FR
YV .....Solenoid valve 220/230 VAC 50/60HZ 15VA
KL.....Oil control 230V 50/60HZ
HL1.....White indicator light BA9S 230V
PT..... Hour counter
Jumper ..... For remote control installation

Motor cable cross-section:

4÷5,5 HP compressors
V230.....7G1.5 mm²
V400.....7G1.5 mm²

7,5 HP compressors
V230.....7G2.5 mm²
V400.....7G1.5 mm²

10 HP compressors
V230.....7G4 mm²
V400.....7G2.5 mm²

7 . TECHNICAL DATA

Concept SE	MK113 -4	BK114-4	BK114-5,5	BK119-5,5	BK119-7,5	BK119-10
HP / Kw	4 / 3	4 /3	5,5 / 4	5,5 /4	7,5 / 5,5	10 / 7,5
V/Hz/ph	400/50/3	400/50/3	400/50/3	400/50/3	400/50/3	400/50/3
Amps	7,2	7,2	9,6	9,6	12,7	16
bar	10	10	10	10	10	10
Air intake (l/min)	465	480	580	625	840	960
Tank (l)	270	270	270	270	270 500	270 500
dB(A)	69	70	71	69	70	72
Dimemsions (cm)	112x60x137	112x60x137	112x60x137	112x60x137	112x60x137 200x60x137	112x60x137 200x60x137
Weight (Kg)	173	190	193	196	203 250	210 260

Concept TA	BK119-5,5	BK119-7,5	BK119-7,5 AP	BK120-10	BK120-10 AP
HP / Kw	5,5 /4	7,5 / 5,5	7,5 / 5,5	10 / 7,5	10 / 7,5
V/Hz/ph	400/50/3	400/50/3	400/50/3	400/50/3	400/50/3
Amps	9,6	12,7	12,7	16	16
bar	10	10	14	10	14
Air intake (l/min)	625	840	705	1080	900
Tank (l)	0 270 500	0 270 500	0 270 -	0 - 500	0 270 -
dB(A)	69	67	70	73	69
Dimemsions (cm)	79x58x70 112x60x137 200x60x137	79x58x70 112x60x137 200x60x137	79x58x70 112x60x137	91x79x81 - 200x80x150	91x79x81 120x80x150 -
Weight (Kg)	108,5 203 261	111,5 206 263	111,5 206	165 - 305	165 250 -